



# MISSOURI BOTANICAL GARDEN

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## GEORGE ENGELMANN BOTANICAL NOTEBOOKS

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*Pinus australis*

March 21 1871

Bluffton S.C. 8 miles from town March 13  
1871

Pollen



$\frac{33 - 36.6}{415}$ , mean  $\frac{34.5}{415}$  mm

0.036 - 0.040 mm



upper side lower side lowest lateral scales  
not yet fully open  $\frac{1}{3}$  or  $\frac{1}{4}$  of the length  
'of the involucrum'



0 1 2 3 4 5 6 7 8 9 10

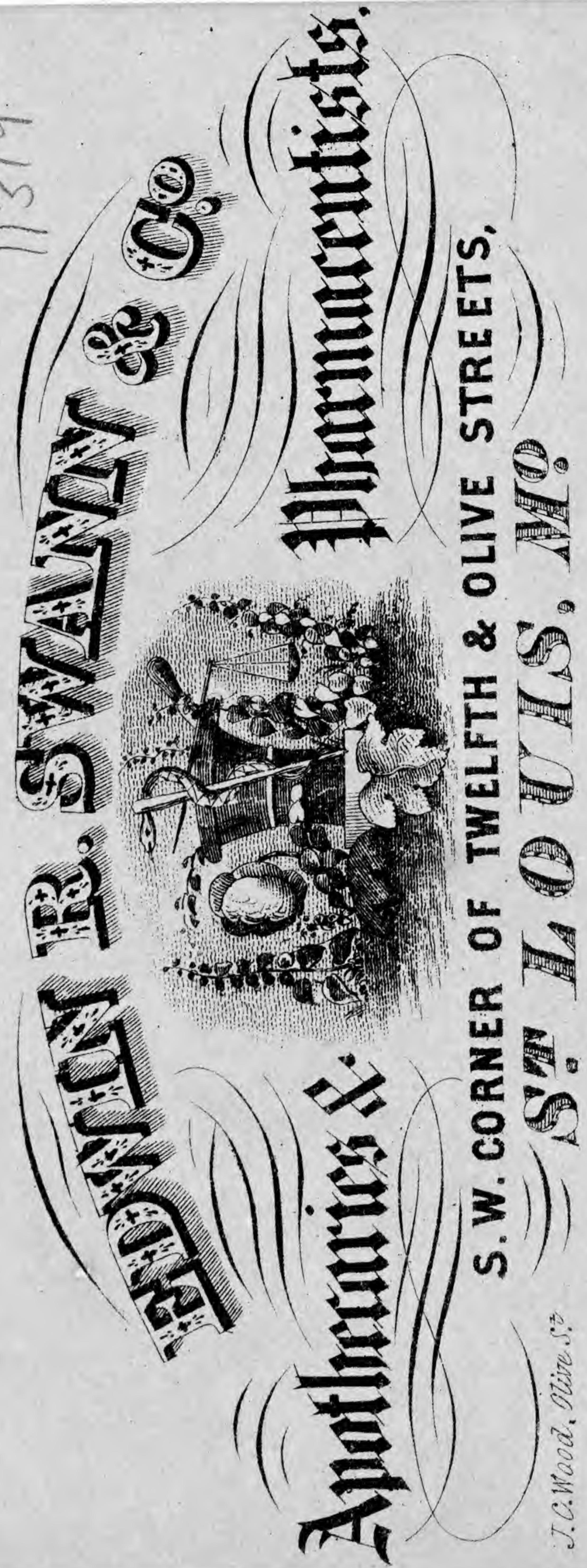
cm

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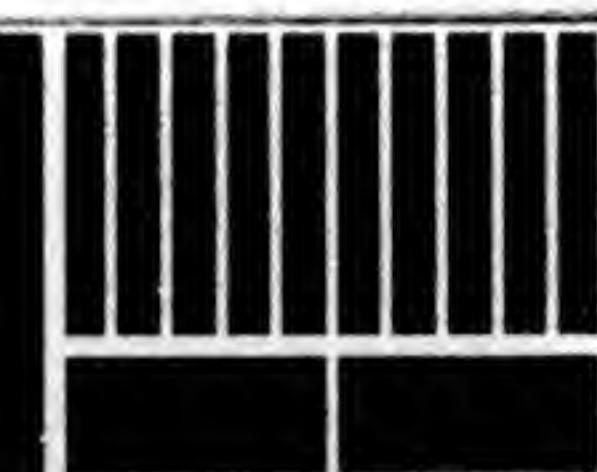


MISSOURI  
BOTANICAL  
GARDEN

11319



MISSOURI BOTANICAL PAPERS  
GEORGE ENGELMANN



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cm

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MISSOURI  
BOTANICAL  
GARDEN

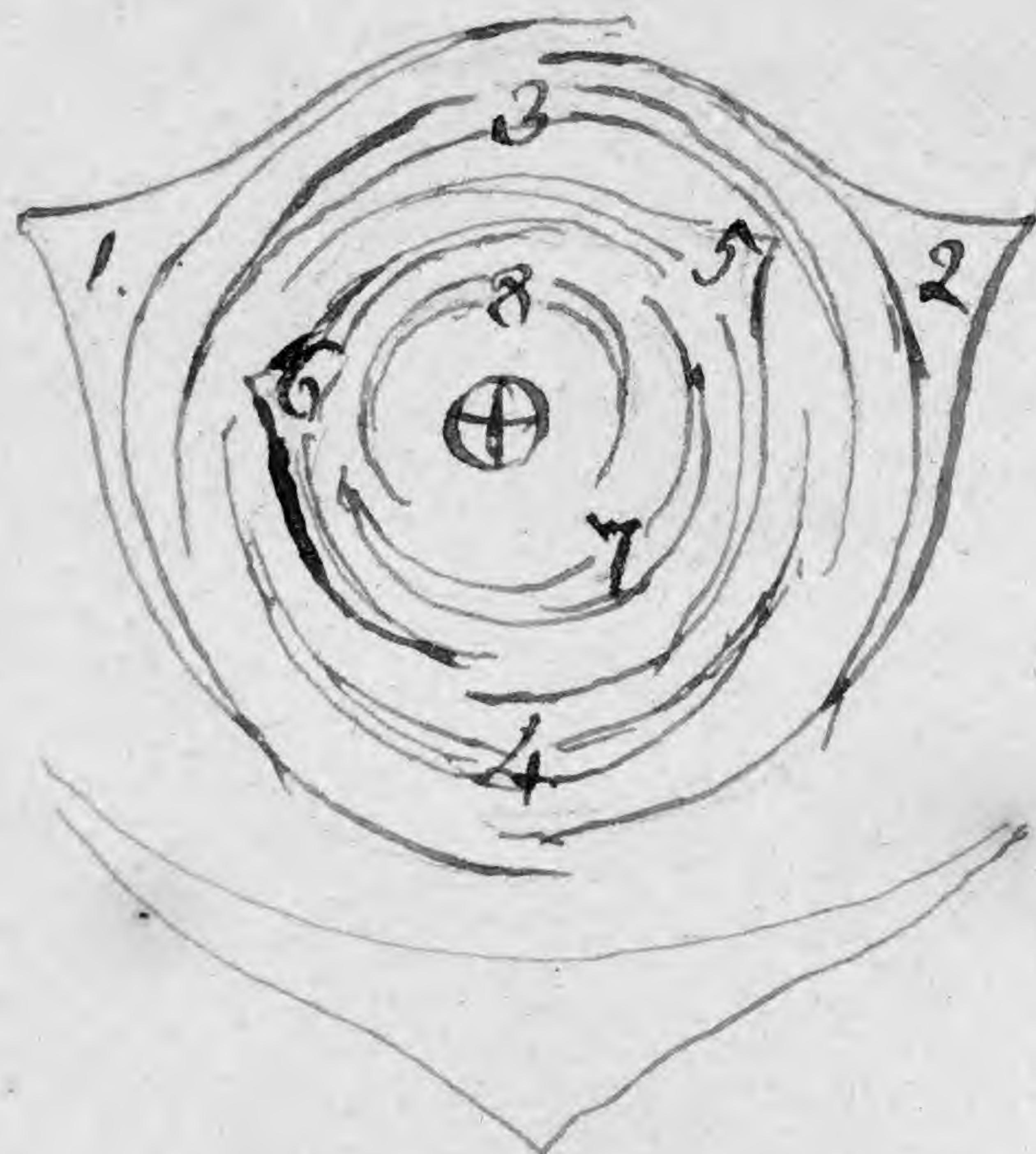


*Piau austrolei*

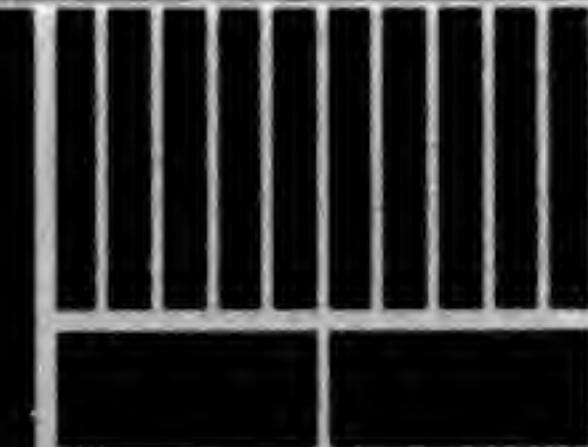
April 15 1871

for Sc. Car. Received on 1866

outer lateral sepals ~~obliquely~~ <sup>on both sides</sup> overlapping  
outermost lateral ~~sepals~~ <sup>on second</sup> overlapping  
the inner one, and smaller.



Involution  
of male ament  
on leaf.



0 1 2 3 4 5 6 7 8 9 10

cm

copyright reserved

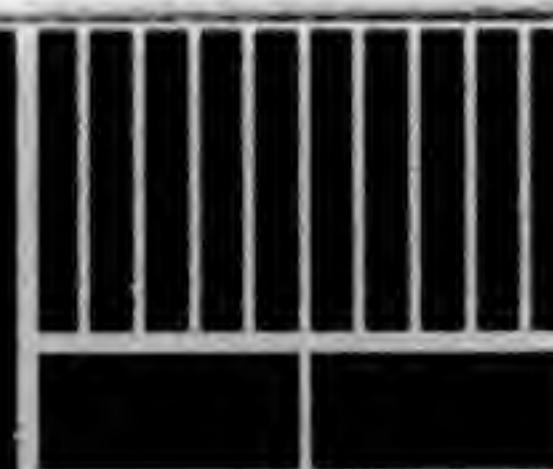


MISSOURI  
BOTANICAL  
GARDEN

11320

Leitch & Collies  
Dry Goods  
West Fifth and Market Streets  
South Corner Streets

MISSOURI BOTANICAL GARDEN PAPERS  
GEORGE ENGELMANN



0 1 2 3 4 5 6 7 8 9 10  
cm

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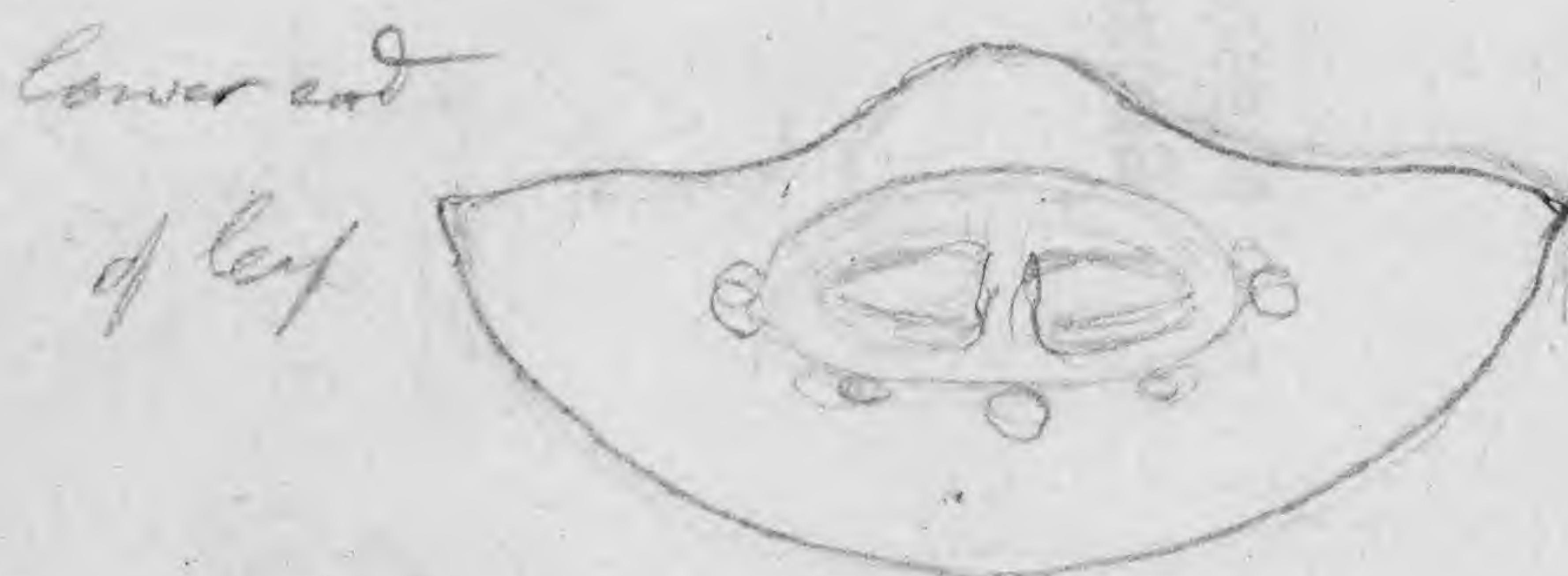
MISSOURI  
BOTANICAL  
GARDEN

*Dianthus austrolis*  
S. Corrol

Oct 13 1875

$\times 30$

$\times 60$



teeth  $\frac{1}{10}$  mm long

$\frac{10}{60}$  mm distant

0.016

0.166

new tip



0 1 2 3 4 5 6 7 8 9 10

cm

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MISSOURI  
BOTANICAL  
GARDEN

11321

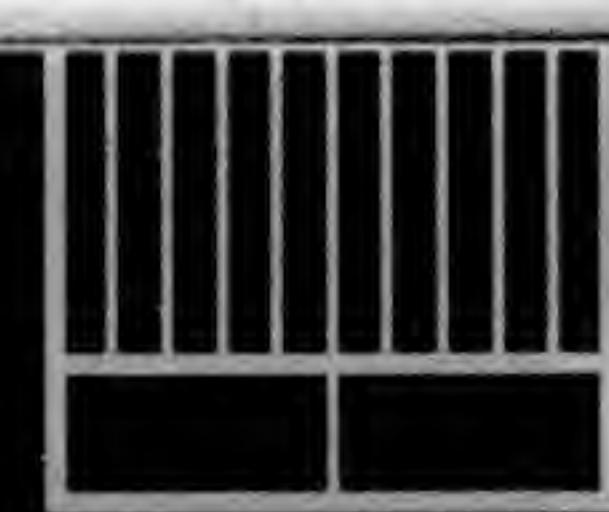
ALEX. LEITCH,

APPRECIARY AND CHEMIST,

Marble Building, Cor. Fourth and Olive Streets,

ST. LOUIS, MO.

MISSOURI BOTANICAL GARDEN  
GEORGE ENGELMANN PAPERS



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cm

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copyright reserved



MISSOURI  
BOTANICAL  
GARDEN

5 tub

66

*Poecilanthus*

343-7



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MISSOURI  
BOTANICAL  
GARDEN

11322

MISSOURI BOTANICAL GARDEN  
GEORGE ENGELMANN PAPERS



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MISSOURI  
BOTANICAL  
GARDEN

*Pinus sibiricus*

April 6 1871

St Domingo, Poiteau, H. and Philadelphia



x30

x60

x30



0 1 2 3 4 5 6 7 8 9 10

cm

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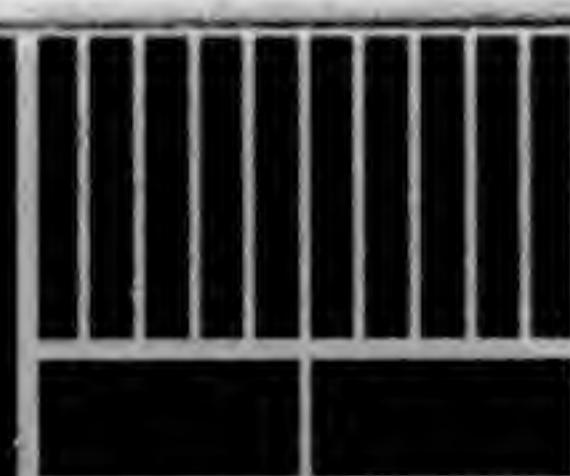


MISSOURI  
BOTANICAL  
GARDEN

11323

Leitch & Colliers  
Crownings  
West Fiftieth  
South West Corner and Market  
Streets

MISSOURI BOTANICAL GARDEN  
GEORGE ENGELMANN PAPERS



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cm

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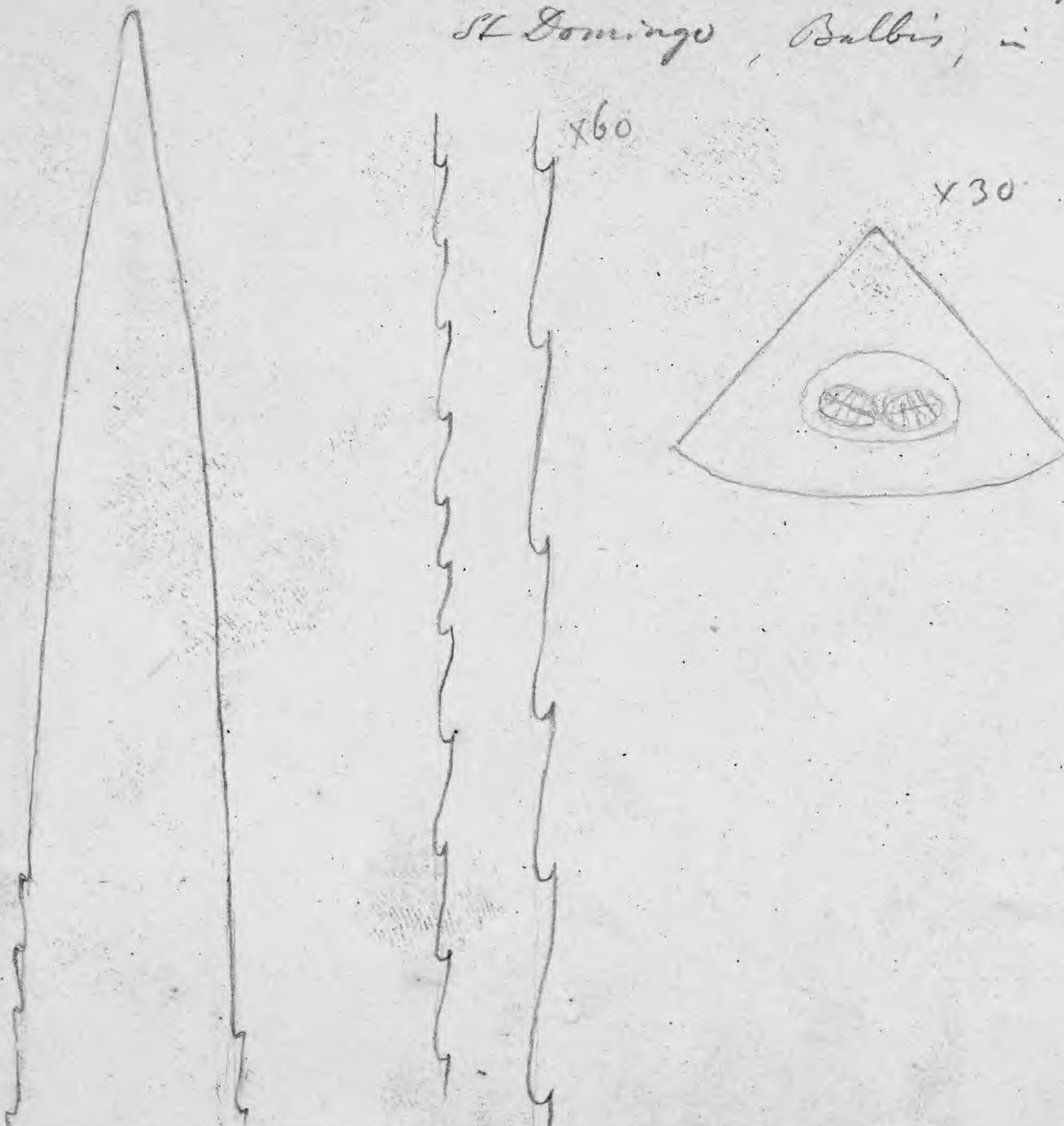


MISSOURI  
BOTANICAL  
GARDEN

*P. occidentalis*

April 6 1871

St Domingo, Balbis, in H. Berolin



0 1 2 3 4 5 6 7 8 9 10

cm

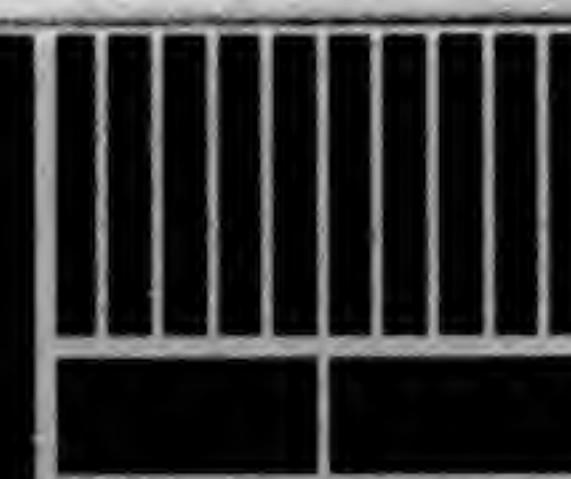
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MISSOURI  
BOTANICAL  
GARDEN

11324

Leitch & Collies  
DRUGGISTS  
West Fifth and Market  
South West Corner Streets



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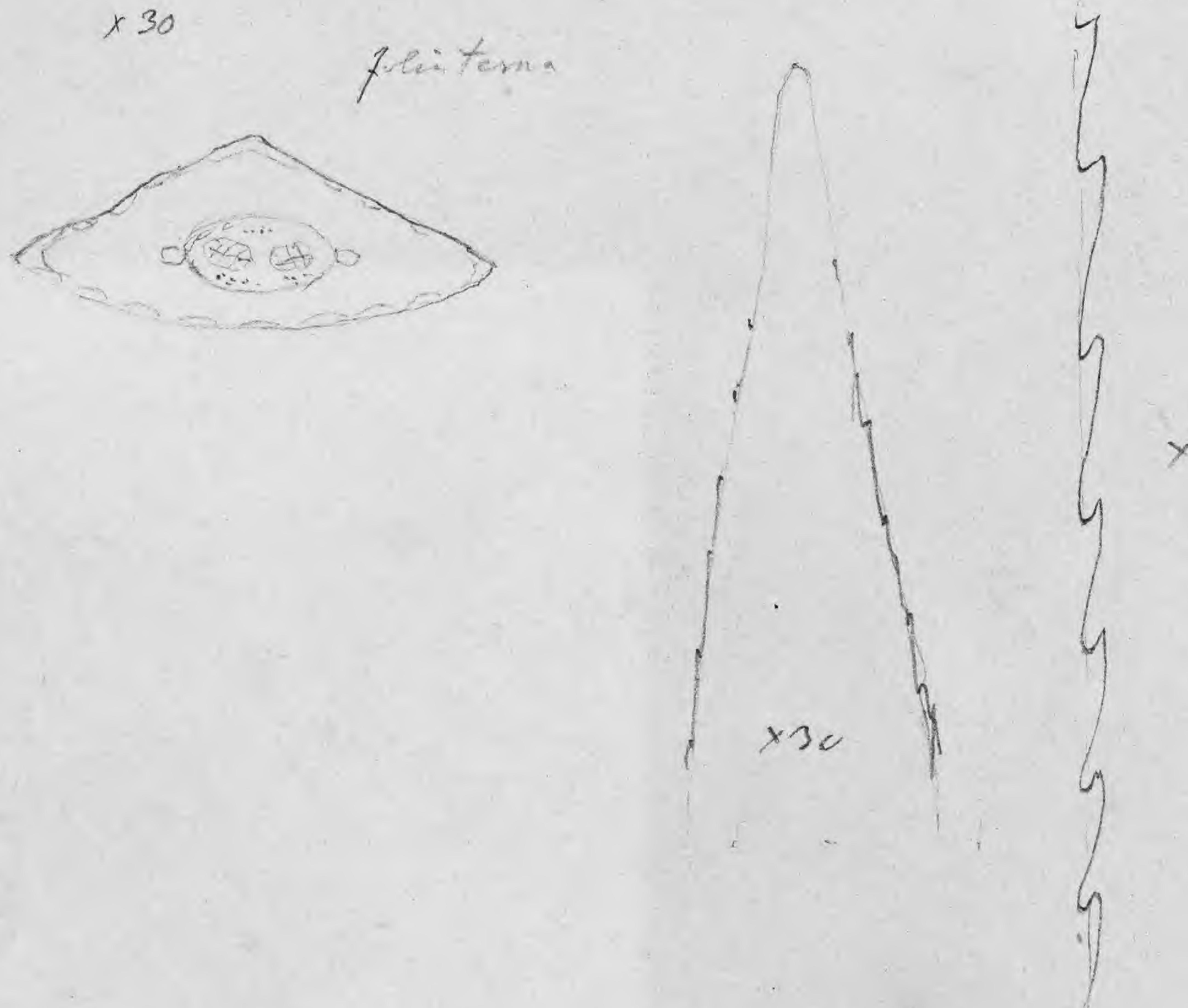
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BOTANICAL  
GARDEN

MISSOURI BOTANICAL GARDEN  
GEORGE ENGELMANN PAPERS

*Prunus occidentalis* Sw

April 30 1878

San Domingo & Parag.



0 1 2 3 4 5 6 7 8 9 10

cm

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MISSOURI  
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GARDEN

11325

HENRY T. ROHNFING

APOTHECARY,

No. 2600 Laclede Ave., S. W. Cor. Jefferson Ave.,  
ST. LOUIS, MO.

No. \_\_\_\_\_ Date, \_\_\_\_\_

187

Al

MISSOURI BOTANICAL GARDEN  
GEORGE ENGELMANN PAPERS



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MISSOURI  
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GARDEN

*Geo. Engelmann, M. D.,*

No. 3003 Locust Street,

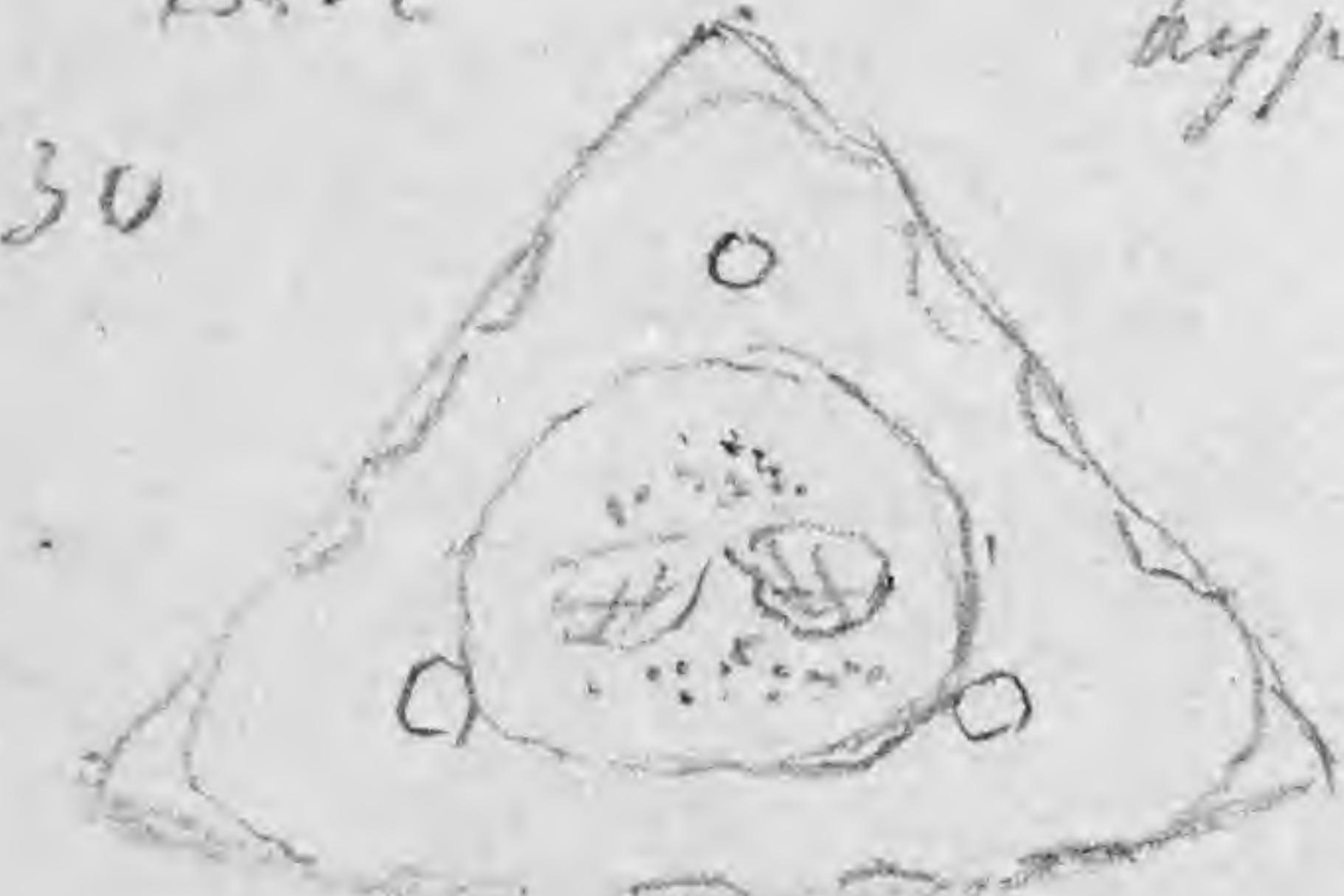
*Pooecidulus*

May 2<sup>nd</sup> 1878

5-leafed

leaf 1" wide

x30



hypoderm in the angles  
and in bundles along  
the edges

proportion not quite clear

3' ventral, dust resting

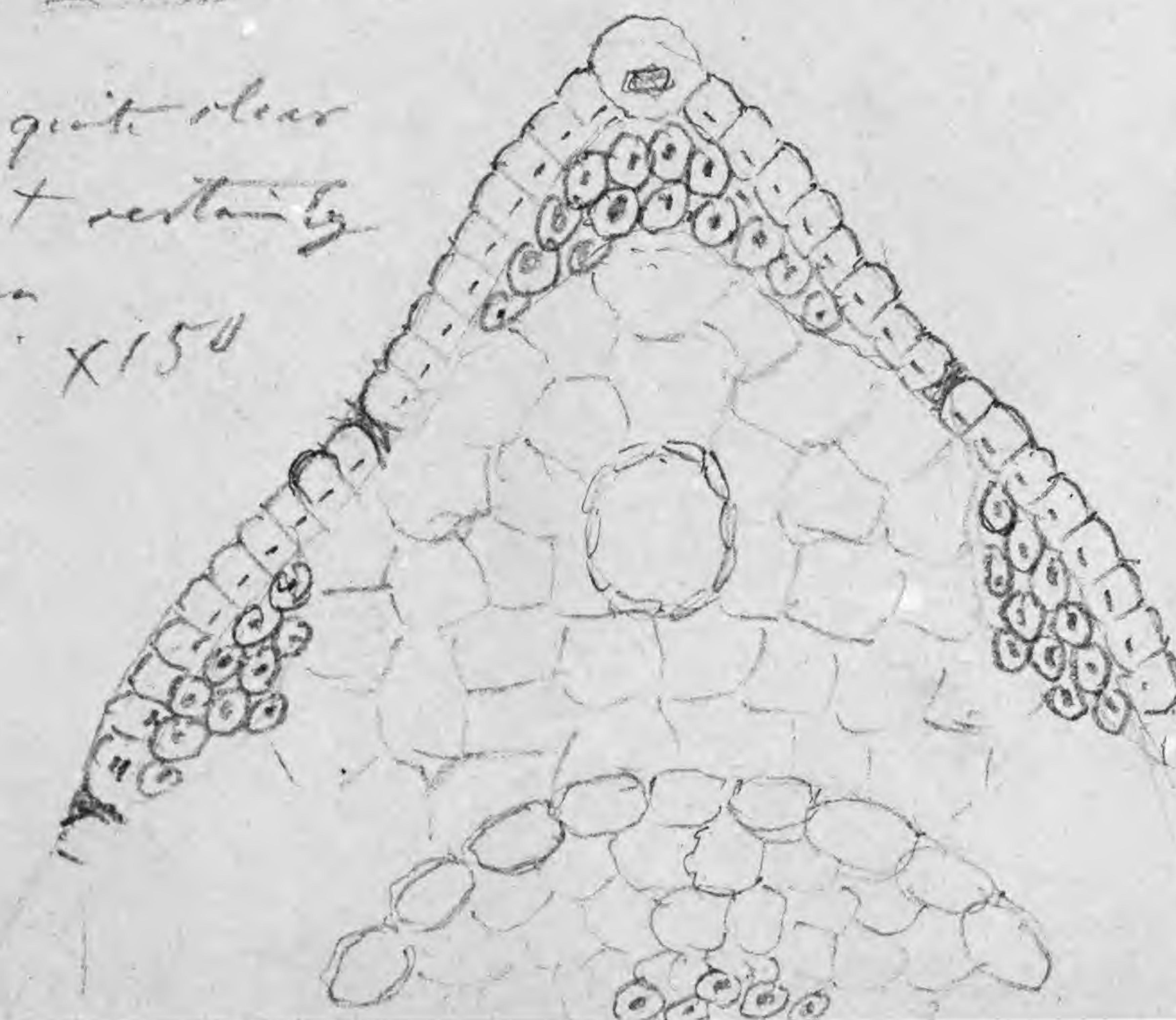
1' paranchyma

2' primary

latent over

apparently

close to sheath



x150

x30



x60



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cm

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BOTANICAL  
GARDEN

11326

HENRY T. BONNIN &  
APOTHECARY,  
No. 2600 Market Ave., S. W. Cor. Jefferson Ave.,  
ST. LOUIS, MO.

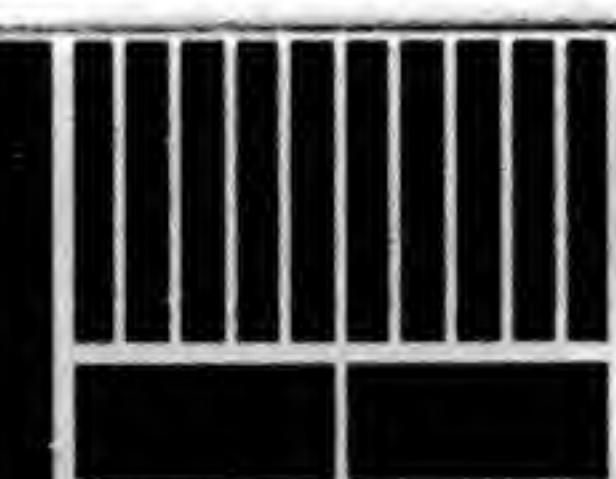
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AP

MISSOURI BOTANICAL GARDEN  
GEORGE ENGELMANN PAPERS

Geo. Engelmann, M. D.,  
No. 3003 Locust Street,



0 1 2 3 4 5 6 7 8 9 10

cm

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BOTANICAL  
GARDEN

leaves 1.2 mm wide "Pinus patula"?

9-10 in. long

Sierra Madre

sheath somewhat divided

May 16 1878

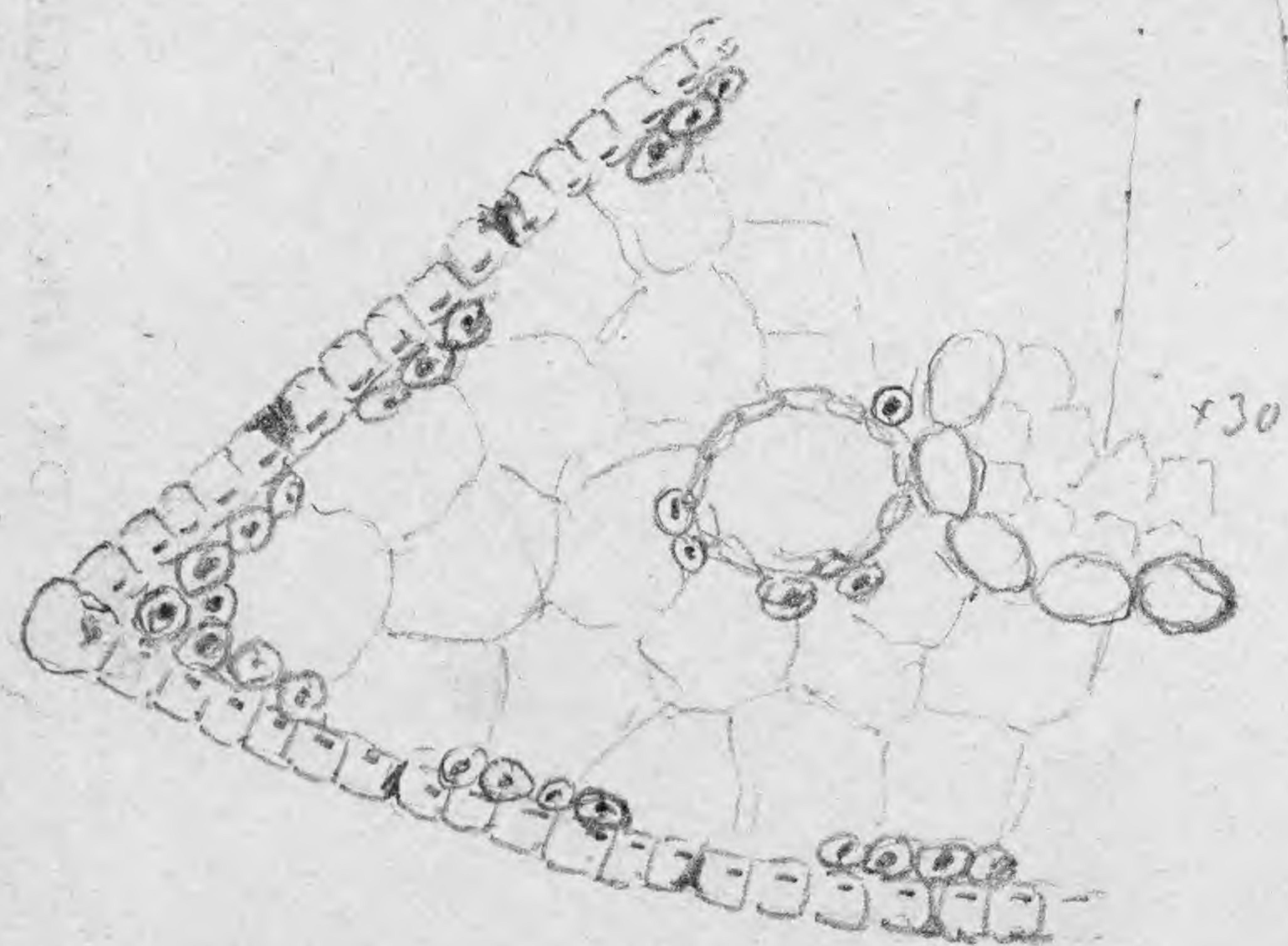
Seemann 1961

- Hb Kew

- occidentalis



x20



x30

Y

x60

Ducts two, close to sheath, rarely - 3? one a few hypoderm cells around them, or none hypoderm with sheath and all and leaf in small interrupted groups



0 1 2 3 4 5 6 7 8 9 10

cm

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MISSOURI  
BOTANICAL  
GARDEN

11327

GEO. B. FRESE & CO'S,  
No. 3005 Olive Street,  
Near Garrison Av. ST. LOUIS.



0 1 2 3 4 5 6 7 8 9 10

cm

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Druggist  
Prescription Store,  
St. Louis

MISSOURI BOTANICAL GARDEN  
GEORGE ENGELMANN PAPERS

Prescribed by

DR. GEO. ENGELMANN,  
N. W. Cor. Garrison Ave. & Locust St.,



MISSOURI  
BOTANICAL  
GARDEN

16 Feb

68

*P. Elliottii*

351 bio 639



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cm

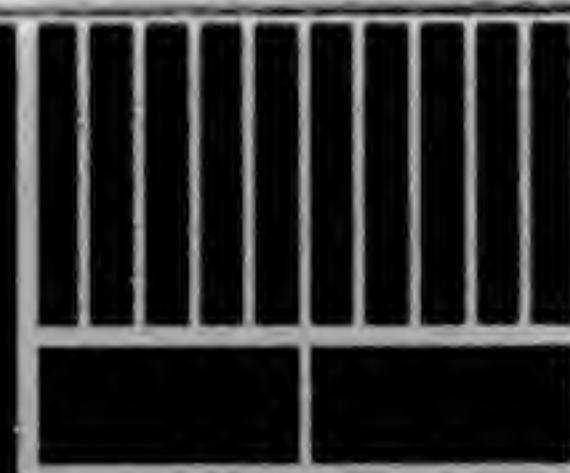
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MISSOURI BOTANICAL GARDEN  
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cm

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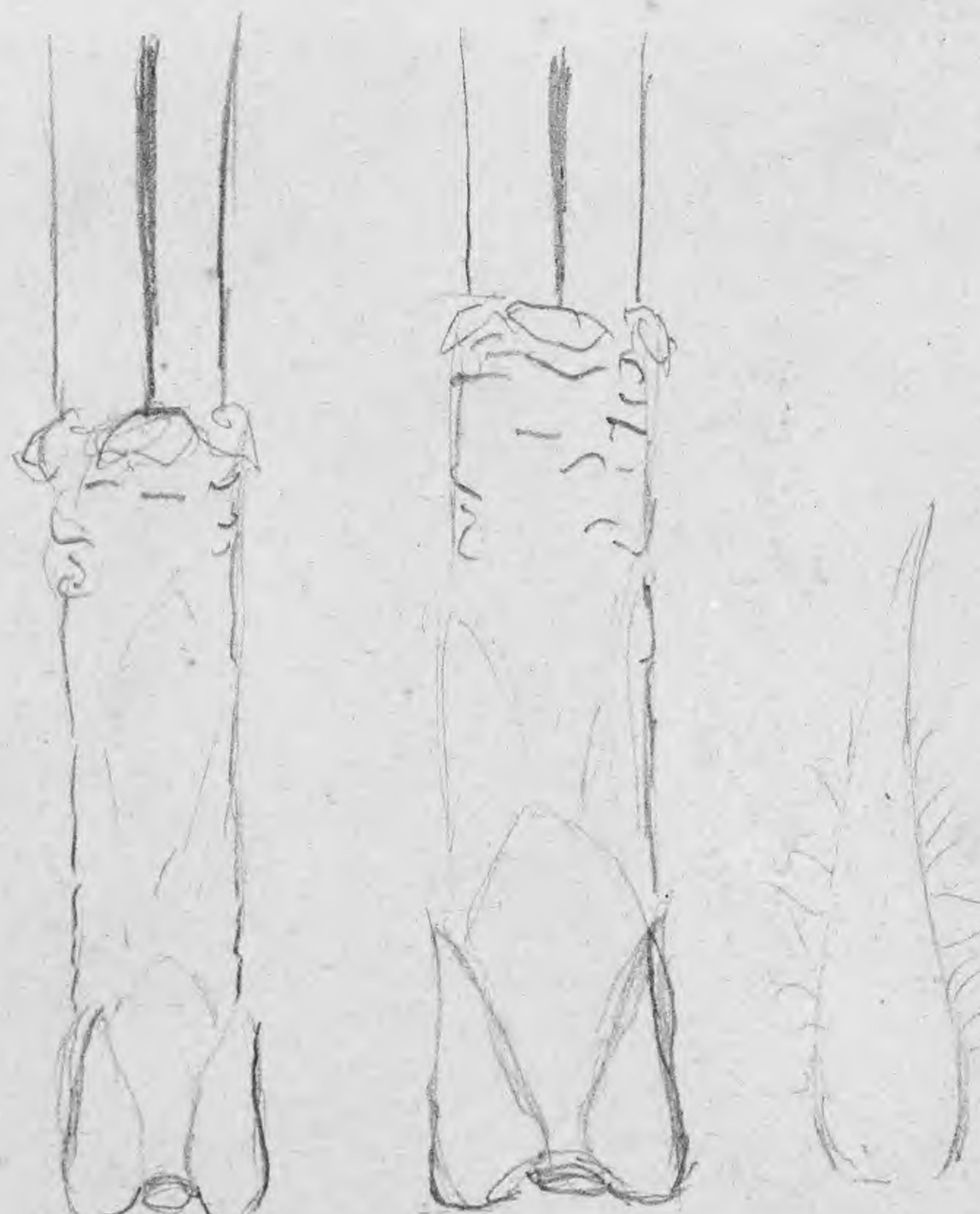


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BOTANICAL  
GARDEN

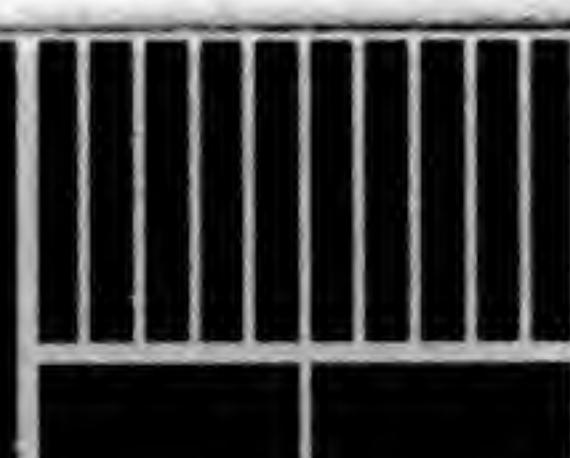
Pim Elliott

May 1<sup>st</sup> 1871

Bluffton S.C.



different leaves x4



0 1 2 3 4 5 6 7 8 9 10

cm

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MISSOURI  
BOTANICAL  
GARDEN

11329

Leitch & Coates  
DRUGGISTS  
South West Corner Fifth and Market Streets



0 1 2 3 4 5 6 7 8 9 10

cm

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GARDEN

MISSOURI BOTANICAL GARDEN  
GEORGE ENGELMANN PAPERS

*Pinus Elliottii*

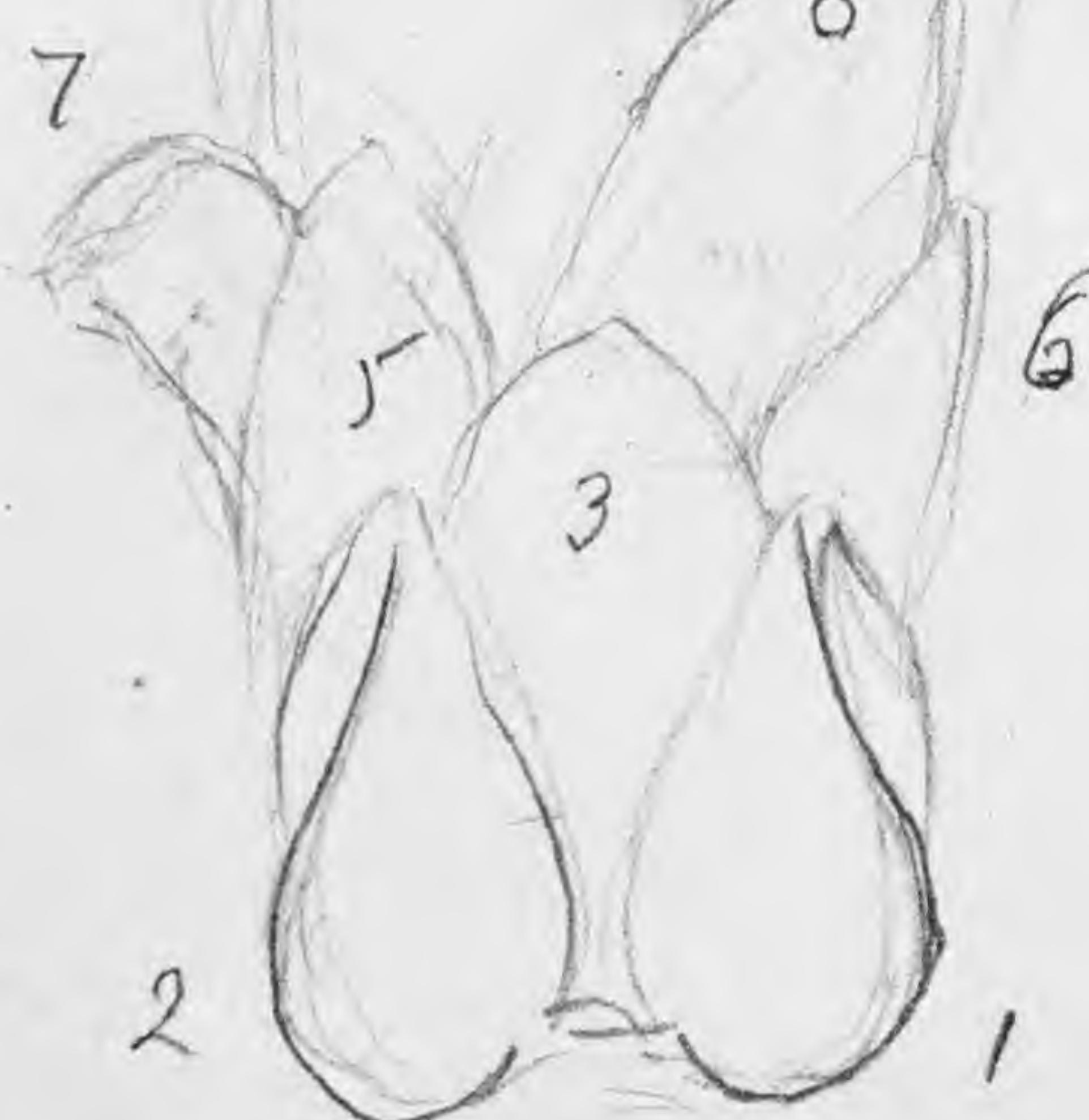
St. John's Florida

Wm M. Cauley

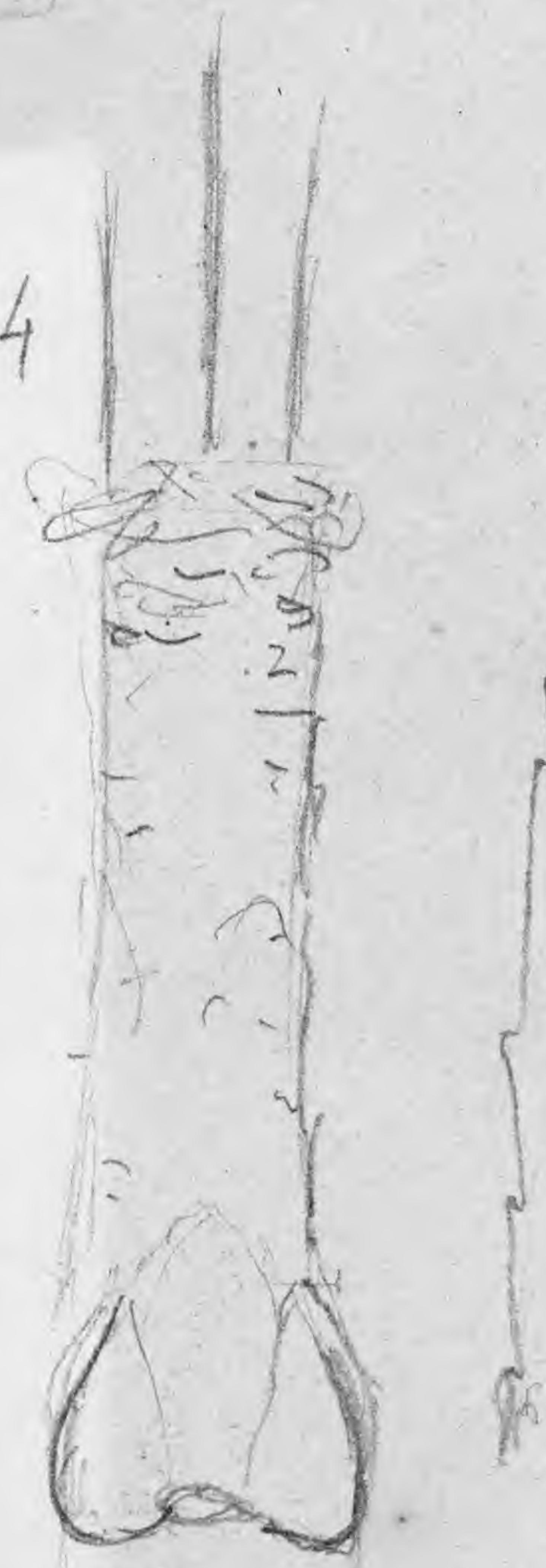
May 21 1871

Dollar a unit by 9

x4



x4



point of leaf

x30

1869

Leaves 6" long



0 1 2 3 4 5 6 7 8 9 10

cm

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MISSOURI  
BOTANICAL  
GARDEN

11330

Leitch & Coates

DRUGGISTS

Fifth and Market  
West Corner  
South Streets



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cm

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MISSOURI  
BOTANICAL  
GARDEN

MISSOURI BOTANICAL GARDEN  
GEORGE ENGELMANN PAPERS

6 kb

67

*P. oocarpa*

1 2 3



0 1 2 3 4 5 6 7 8 9 10

cm

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MISSOURI  
BOTANICAL  
GARDEN

11331

MISSOURI BOTANICAL GARDEN  
GEORGE ENGELMANN PAPERS



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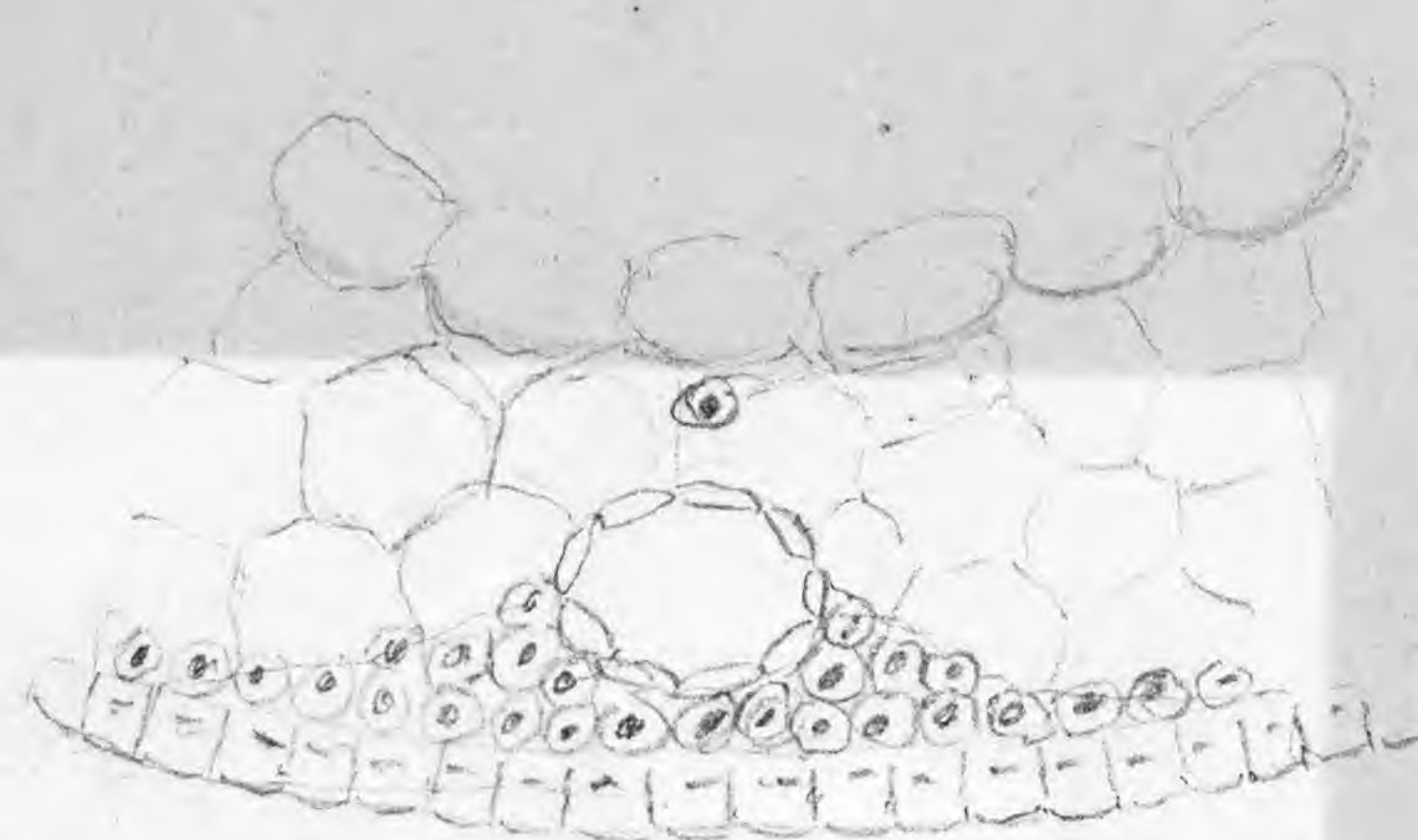
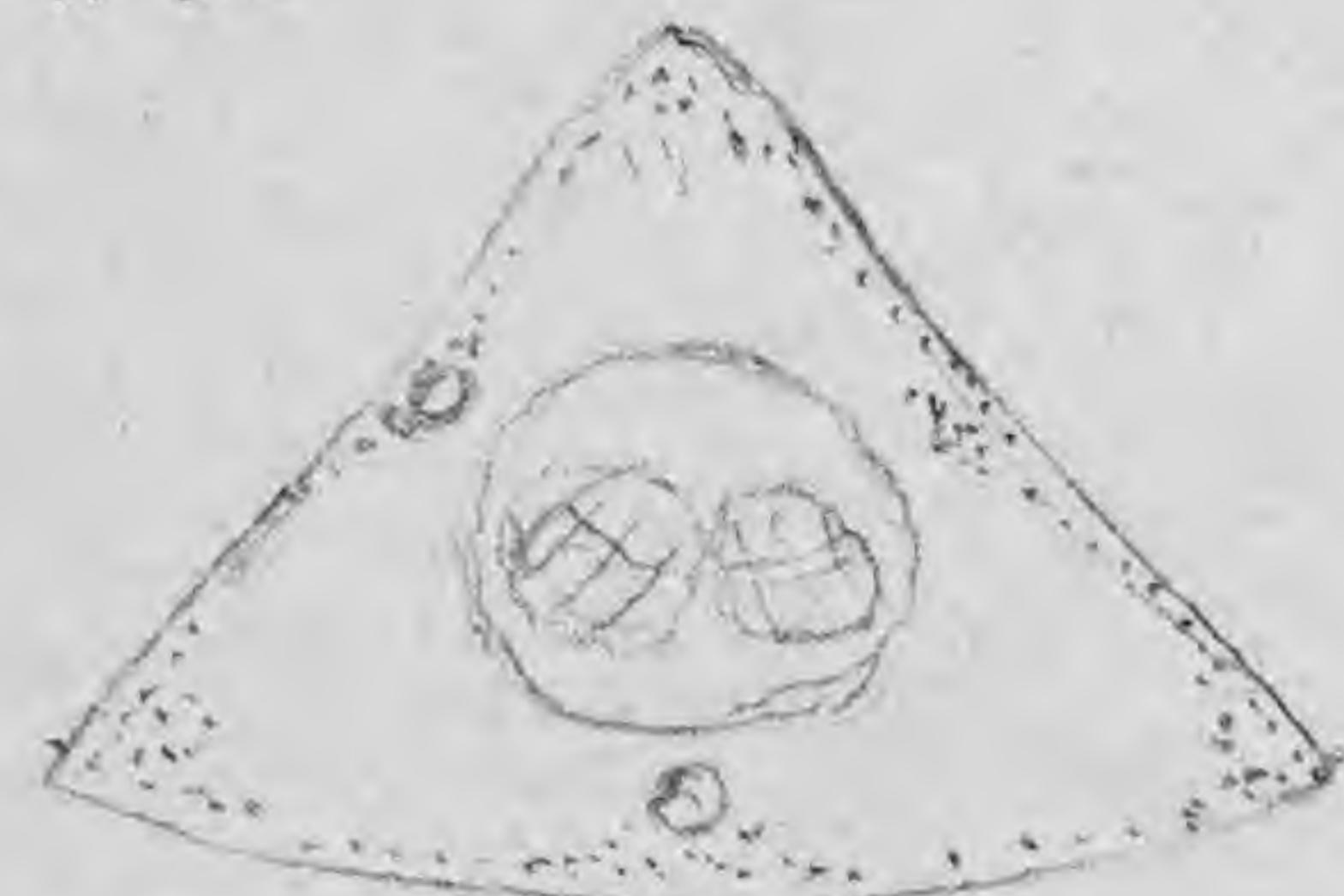
MISSOURI  
BOTANICAL  
GARDEN

"Pimea ovaarpa"

April 30 1878

Mrs. M. Ehrenberg Coll. No. 644

$\times 30$

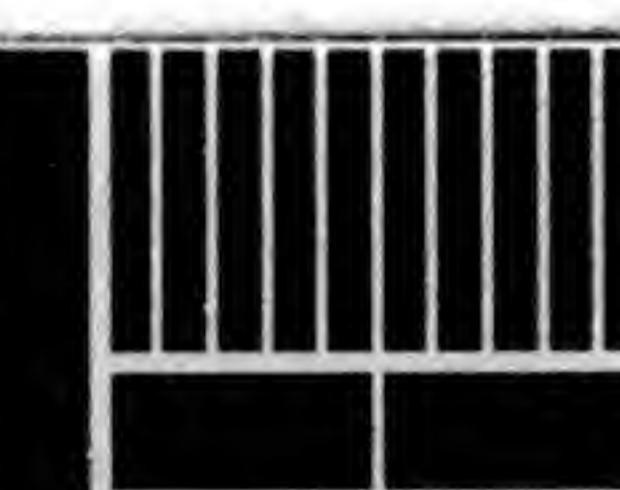


Dorsal duct separated from epidermis  
by hypoderm cells only.  
one or two smaller lateral ducts in  
some position



$\times 60$

Don't bring  
here



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cm

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MISSOURI  
BOTANICAL  
GARDEN

11332

Hennings Pharmacy <sup>TM</sup> BOTANICAL 29

APOTHECARY.

No. 2600 Laclede Ave., S. W. Cor. Jefferson Ave.,  
ST. LOUIS, MO.

No.

Date,

187

*Al*



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MISSOURI  
BOTANICAL  
GARDEN

MISSOURI BOTANICAL GARDEN  
GEORGE ENGELMANN PAPERS

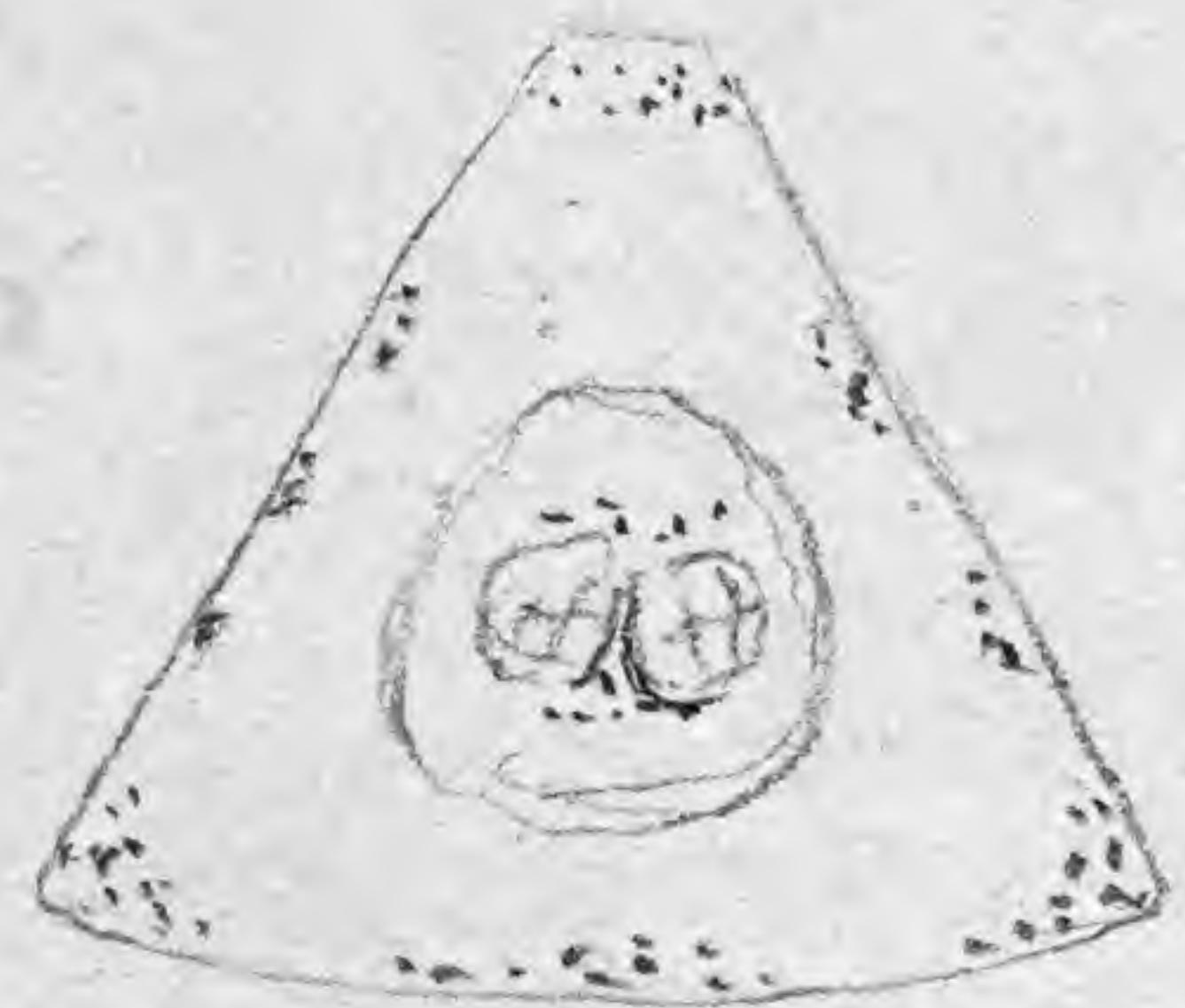
Geo. Engelmann, M. D.,

No. 3003 Locust Street,

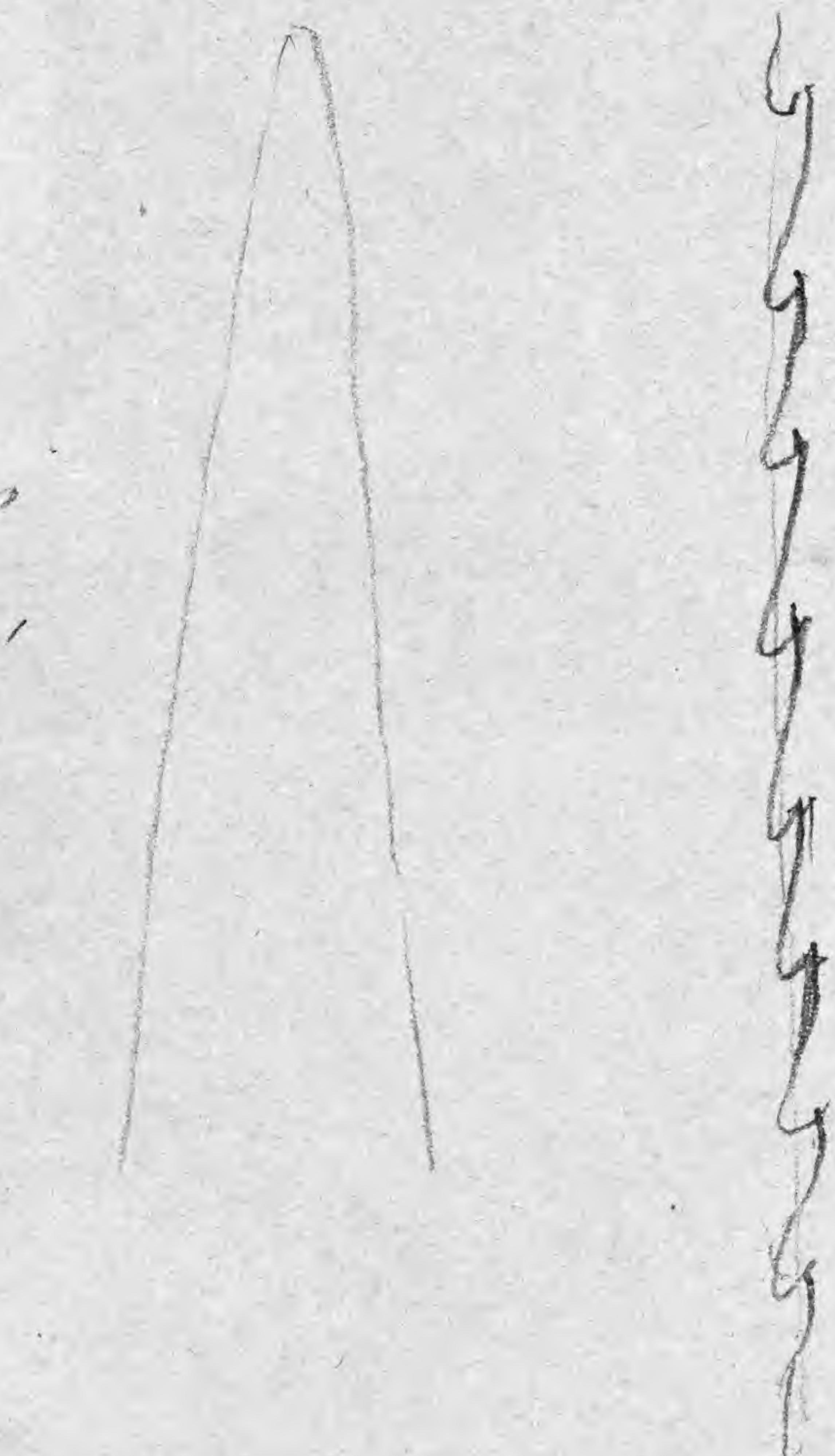
P. ovovaria

May 29 1878

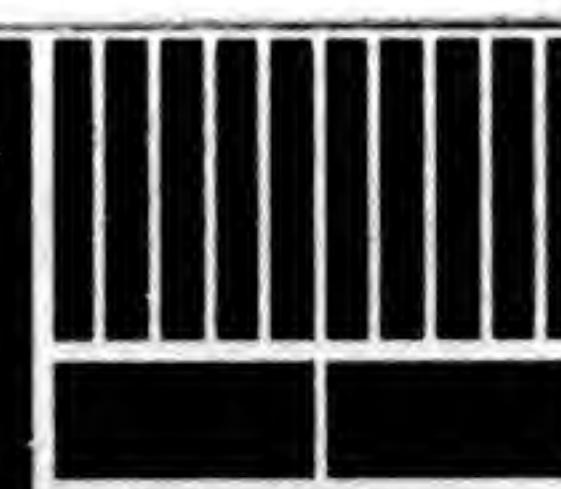
x30



hypoderm strong & convex  
bentiles along sides,  
some within sheath  
no ducts seen



x60



0 1 2 3 4 5 6 7 8 9 10

cm

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BOTANICAL  
GARDEN

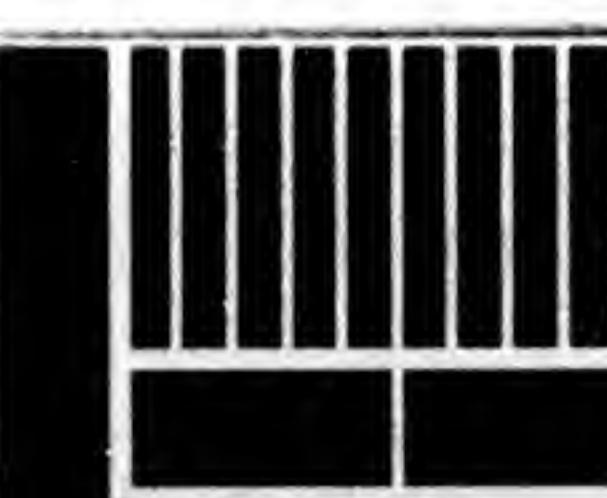
11 333

Cor. 5th  
and  
Walnut St

1006 Olive Street.

A black and white line drawing of an open spiral-bound notebook. The notebook is oriented vertically, with the spiral binding on the left side. The pages are blank and feature horizontal ruling lines. A vertical margin line is positioned on the left side of each page. The spiral binding is depicted as a series of interlocking loops along the left edge. The central gutter shows the fold between the two pages.

## ESTATE PLANNING FOR MEDICAL PRACTITIONERS AND PRACTICE OWNERS



0 1 2 3 4 5 6 7 8 9 10

cm

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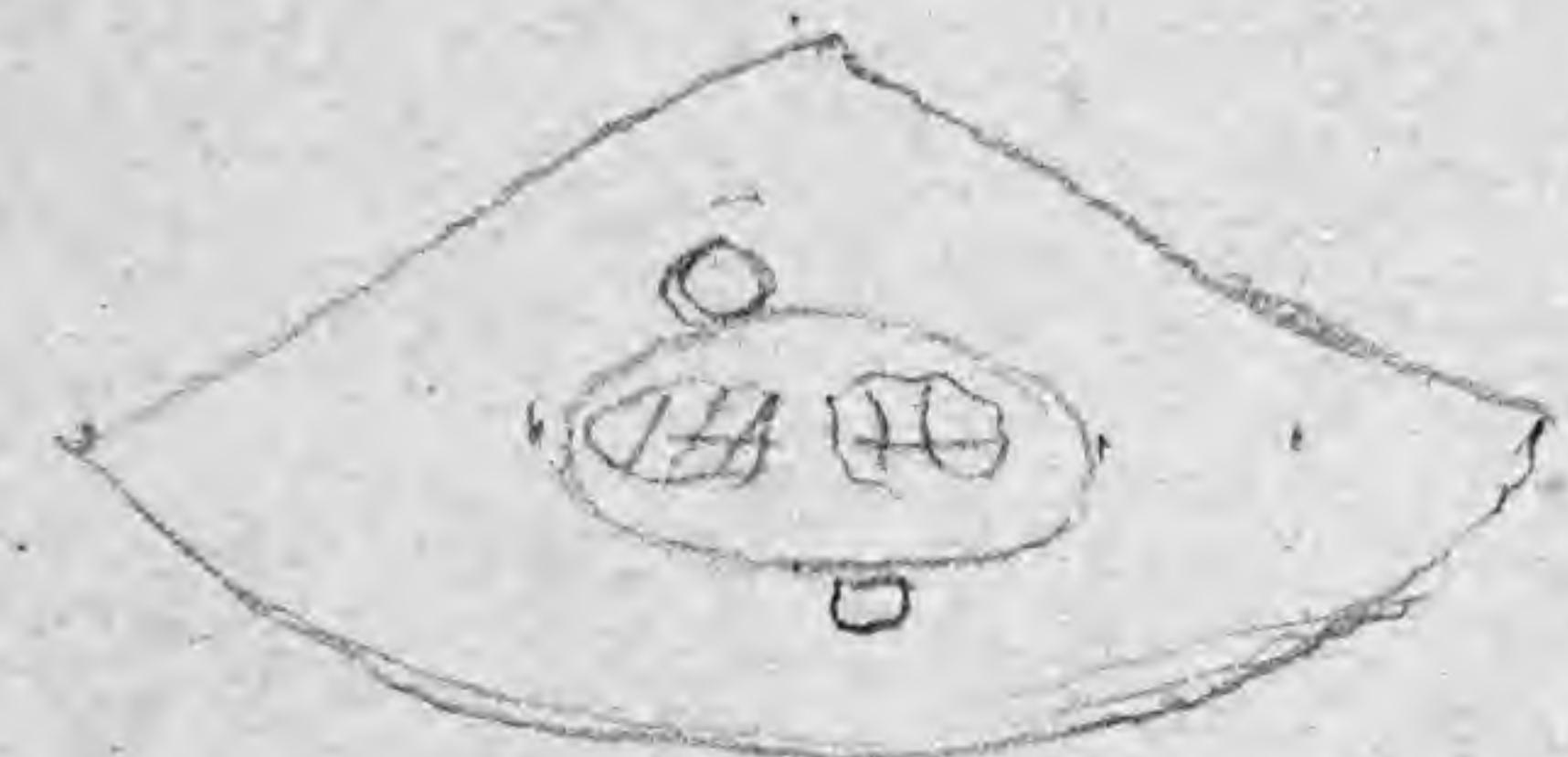


# MISSOURI BOTANICAL GARDEN

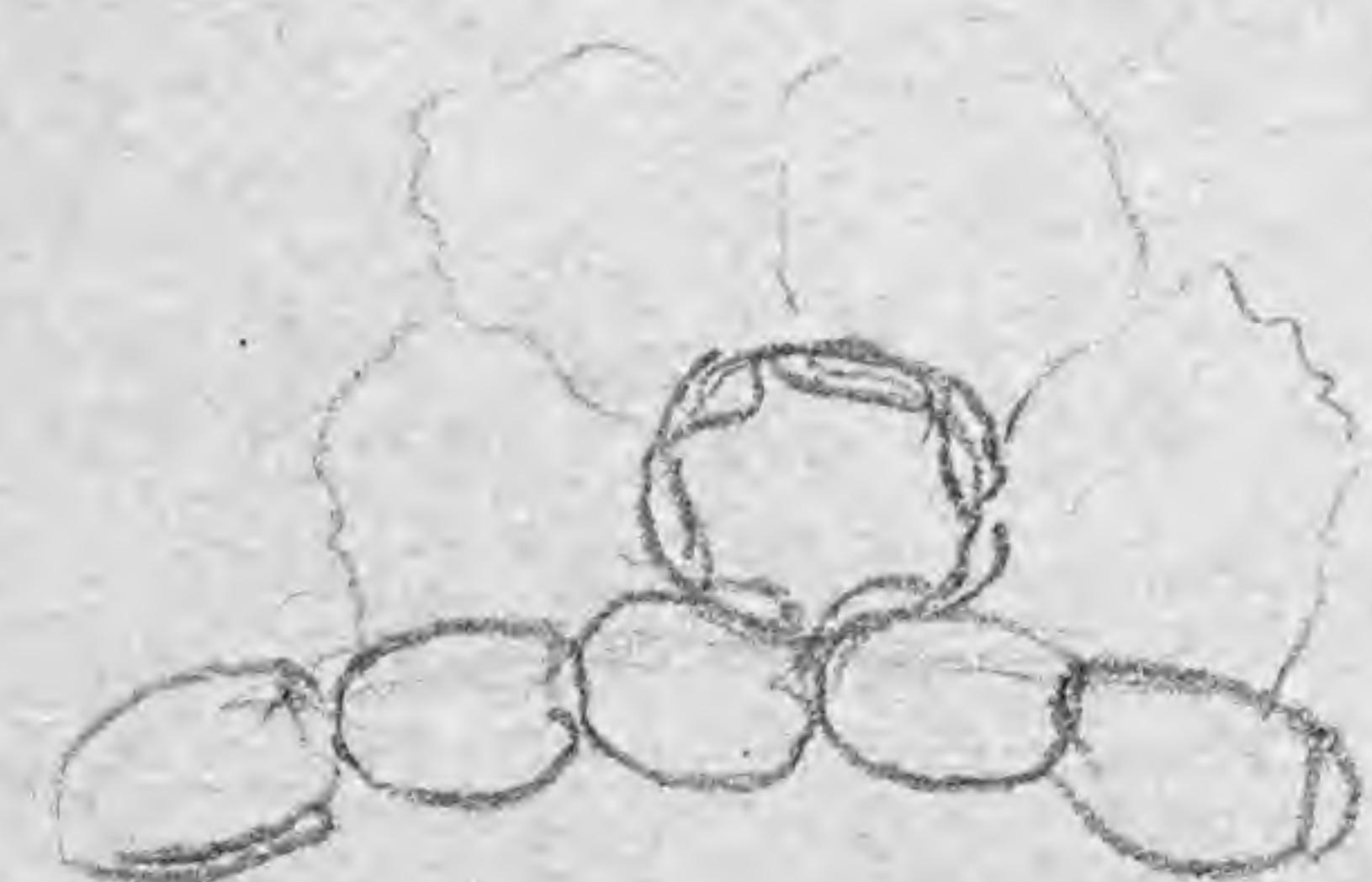
*P. ovata*  
Listman No 10

May 29 1878

x 30



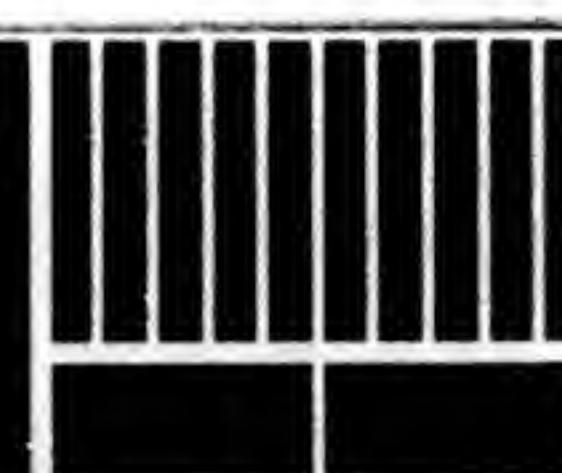
2 interior ducts,  
often only the ventral one  
very little hypoderm



ventral duct  
on sheath, x 150



x60



0 1 2 3 4 5 6 7 8 9 10

cm

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BOTANICAL  
GARDEN

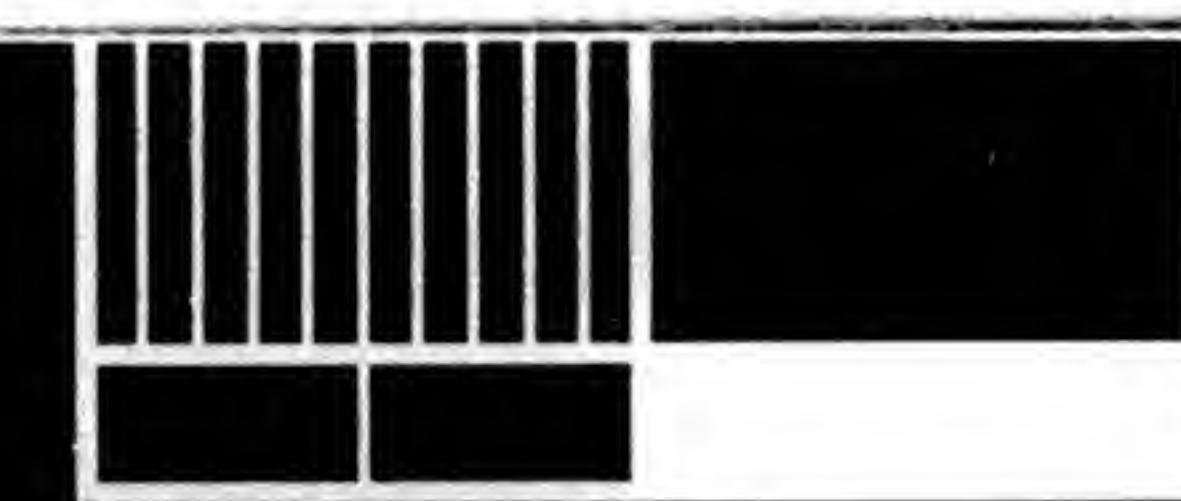
11334

Cor. 5th  
and  
Walnut St

No.  
1006 Olive  
Street.



PURE WINES AND LIQUORS FOR MEDICAL USE.



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cm

1 2 3 4 5 6 7 8 9 10

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GARDEN

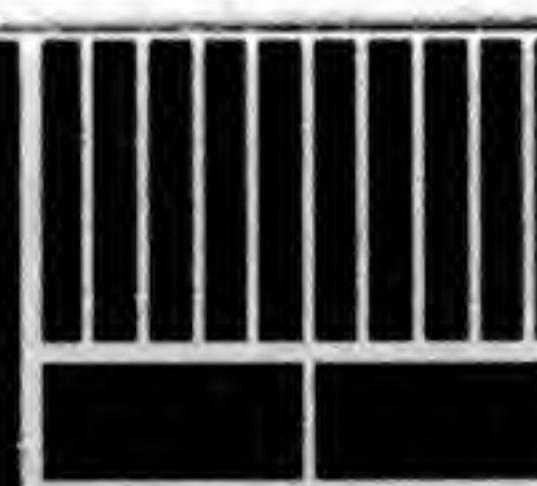
P. Ootage

May 30 1878

Liberia No 4



I can discover no distinct  
hypodium in blades, and  
within sheath



0 1 2 3 4 5 6 7 8 9 10

cm

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MISSOURI  
BOTANICAL  
GARDEN

11335

Henry T. Bonnifield

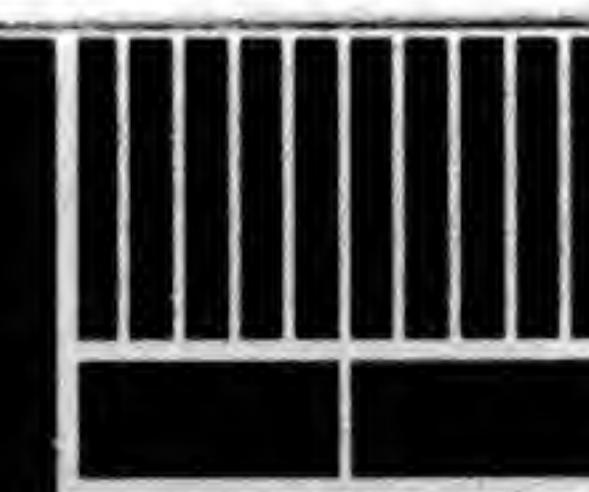
APOTHECARY,

No. 2600 Lacled Ave., S. W. Cor. Jefferson Ave.,  
St. Louis, Mo.

No. \_\_\_\_\_ Date, \_\_\_\_\_

187

Al



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BOTANICAL  
GARDEN

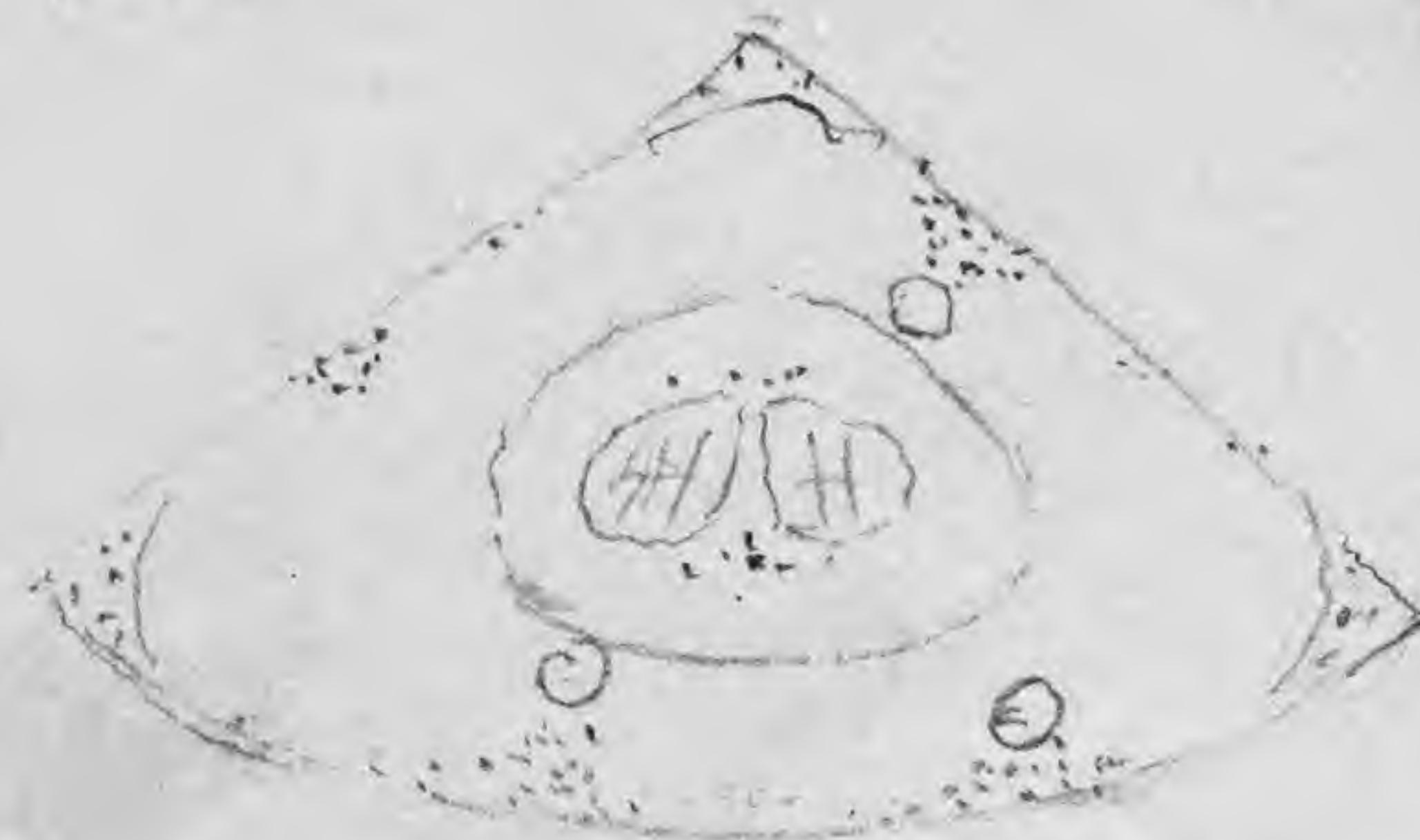
Geo. Engelmann, M. D.,

No. 3003 Locust Street,

*P. ovata*  
Rough

May 30, 1878

$\times 30$

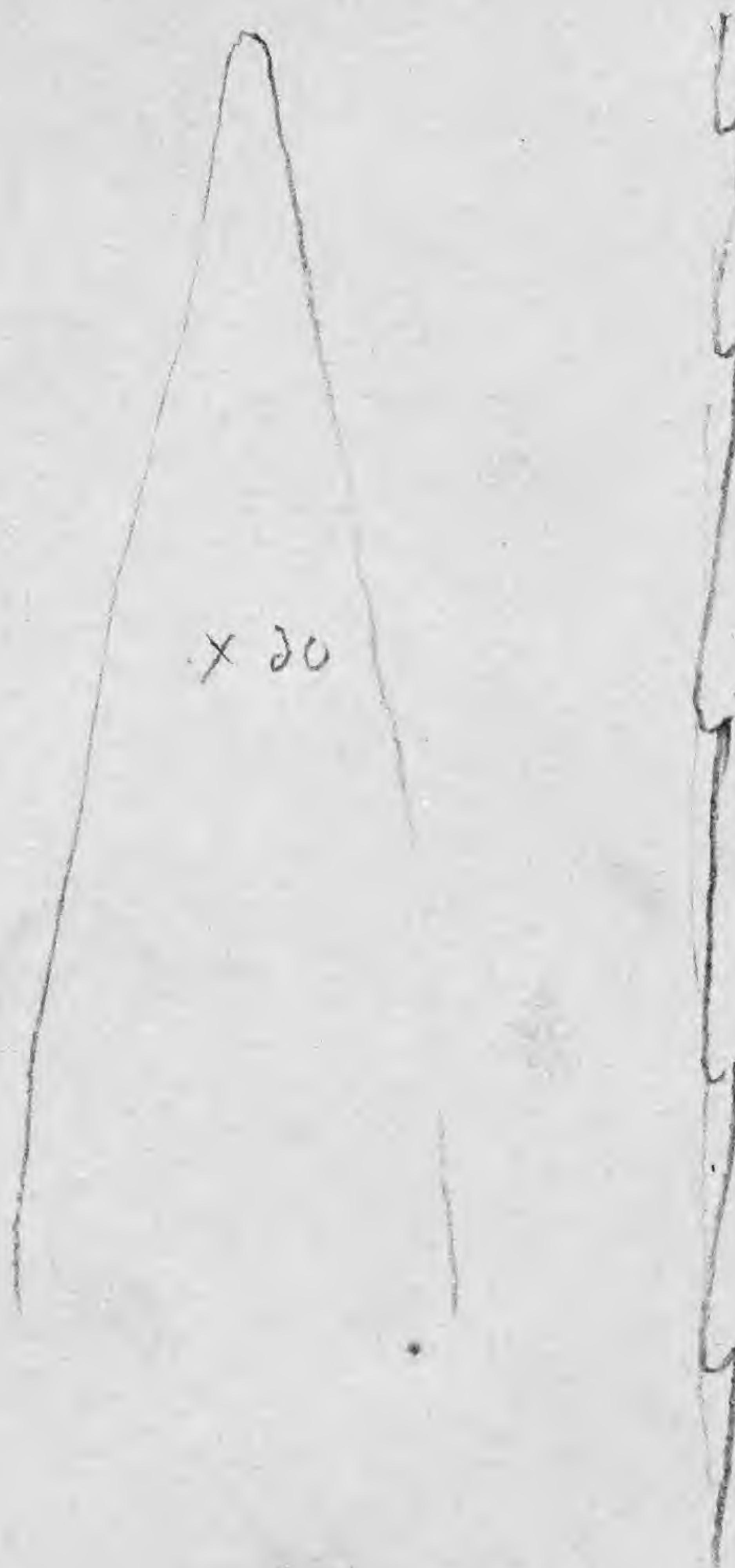


Ducts interior or parenchyma  
mostly hypoderm <sup>bundles</sup> between them and the  
epidermis

large bundles of hypoderm in  
angles and along epidermis  
also within sheath

$\times 30$

$\times 60$



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MISSOURI  
BOTANICAL  
GARDEN

11336

Leinwand T. Boothfing

APOTHECARY,

No. 2600 Laclede Ave., S. W. Cor. Jefferson Ave.,  
ST. LOUIS, MO.

No. .... Date, ....

187

Jf



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GARDEN

*Geo. Engelmann, M. D.,*

No. 3003 Locust Street,

MISSOURI BOTANICAL GARDEN  
GEORGE ENGELMANN PAPERS

*P. occidentalis*

May 30 1878

Elwoodbury  
in H. B. Bush

F. noloo

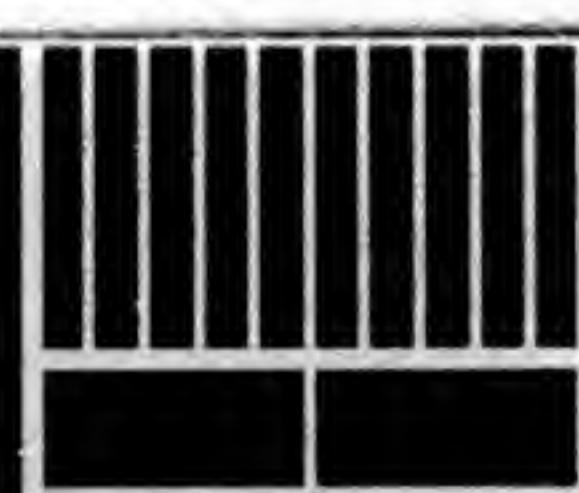


hypoderm 2 bundles  
in corona, some stiff  
under epiderm; - a few  
within sheath

no ducts, or a single  
one near sheath -  
extended through hypoderm  
bundle with periphery

x 60

1 2 3 4 5 6 7 8 9 10



0 1 2 3 4 5 6 7 8 9 10

cm

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MISSOURI  
BOTANICAL  
GARDEN

11337

Geo. Engelmann, M. D.,  
1879

APOTHECARY,

No. 2600 Laclede Ave., S. W. Cor. Jefferson Ave.,  
St. Louis, Mo.

No. \_\_\_\_\_ Date, \_\_\_\_\_

187

JF



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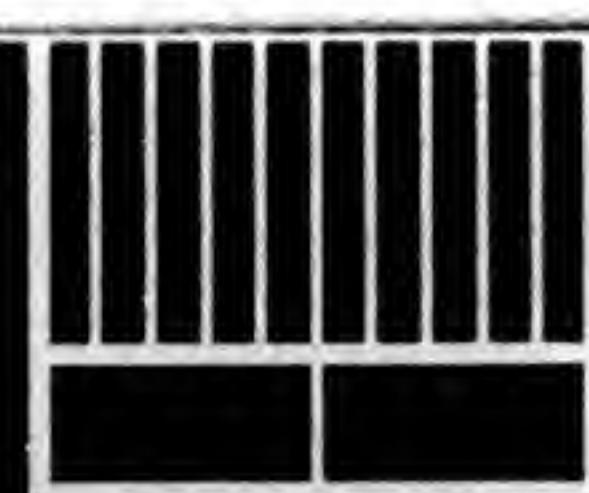
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BOTANICAL  
GARDEN

MISSOURI BOTANICAL GARDEN  
GEORGE ENGELMANN PAPERS

Geo. Engelmann, M. D.,  
No. 3003 Locust Street,



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MISSOURI  
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GARDEN

11338

Geo. Engelmann, M. D.

APOTHECARY.

No. 2600 Laclede Ave., S. W. Cor. Jefferson Ave.,  
St. Louis, Mo.

No.

Date,

187

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GARDEN

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